

DEPARTMENT OF THE ARMY HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND 102 MCNAIR DRIVE FORT MONROE VIRGINIA 23651-1047

ATTG-CD (350)

6 Oct 01

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Test Policy and Procedures Memorandum and Enclosures

- 1. Reference TRADOC Regulation 350-70, Systems Approach to Training Management, Processes, and Products, 9 Mar 99.
- 2. Enclosed policy clarifies and further specifies TRADOC philosophy, policy, and procedures related to specific areas of student academic measurement/testing. This policy is provided as interim change to TR 350-70 pending revision of TR 350-70 and future publication of TRADOC PAM 350-70-5, Guide to Student Performance Measurement/Testing.
- 3. The specific policy and procedural guidance found in the enclosures are as follows:
 - a. Use of Pretests (Encl 1)
- b. Setting Test Standards (Passing Scores) for Performance-Based Tests (Encl 2)
- c. End-of-Phase Tests for DL Phases of Courses (Encl 3)
 - d. Test Control Policy and Procedures (Encl 4)
 - e. Test Reviews, Remediation, and Retests (Encl 5)
- 4. Activities and personnel performing the tasks or functions addressed in these policies and procedures should follow this guidance unless the proponent approves exceptions. Request distribution of this action to the lowest levels of your organization and incorporation of its contents into local regulations and guidance.
- 5. The proponent for this policy is the Training Development and

ATTG-CD (350)

SUBJECT: Student Academic Measurement/Testing Policy

Guidance

Analysis Directorate, ODCST, TRADOC. Point of contact for this action is ATTG-CD, 757-788-5464 (DSN 680).

FOR THE COMMANDER:

/s/ Robert E. Seger for

5 Encls as

RAYMOND D. BARRETT, JR Major General Deputy Chief of Staff for Training

Scroll down or click for enclosures

Encl 1

Encl 2

Encl 3

Encl 4

Encl 5

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ATTG-CD (350)

SUBJECT: Student Academic Measurement/Testing Policy Guidance

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Encl. 1

Use of Pretests

- 1. TYPES OF PRETESTS DEFINED: A pretest can serve 2 purposes –
- a. First, a pretest can be used to verify if the learner has the <u>prerequisite</u> (entry-level) skills, knowledge, and competencies (if any) which should have been acquired previously and will be necessary in order for the learner to master the material in the lesson/module. This is called "<u>prerequisite verification pretest</u>" or just "<u>prerequisite pretest</u>".
- b. Secondly, a pretest can be used to test the learner's prior mastery of the learning objectives (knowledge, skills, and competencies) taught by the subsequent phase/module/lesson (i.e., for the purpose of "testing out" or reducing the objectives that must be mastered within the lesson/module/phase/course). This is called "objective mastery pretest" or just "mastery pretest." Other terms used to describe this usage have included "summative tests" and "mastery tests."

NOTE: Sometimes the term "diagnostic test" is used interchangeably to describe either of the above types of pretests. The use of the term "diagnostic test" gives the learner the mistaken impression that the test has analyzed the learner's skill level. Use the above terms to insure clarity and preciseness.

2. PREREQUISITE PRETESTS:

- a. A <u>prerequisite test</u> may be given at the beginning of any type of instructional unit (IU) as needed, to verify mastery of prerequisite objectives/tasks. If the learner's results verify that s/he has obtained the required prerequisite skills, knowledge, and/or competencies, s/he is allowed to proceed with the subsequent training.
- b. If the learner does not possess necessary prerequisite skills and knowledge, action must be taken. These actions may include (in combination where appropriate):
 - (1) exclusion (not allowing learner to take course),
 - (2) remediation before acceptance/entry,
- (3) conditional entry with the simultaneous administration of remediation with new training,
 - (4) conditional entry pending proof of ability based on in-course tests, or
- (5) conditional entry based upon other evidence that the student can reasonably master the material as expected (i.e., without wasting resources on remediation).
- c. Entry-level skill/knowledge testing is most important:
- (1)Prior to the first lesson of distinct courses, phases, modules, or lessons where the entry level skills of the different courses, phases, or modules might be different; and,
- (2) When there is a substantial break in time between the courses, phases, or blocks (for instance, a break of 2 months between a DL phase and a resident phase of a course, or a break of several years between functional training and advanced training in that functional area.).

3. MASTERY PRETESTS

a. A <u>mastery pretest</u> determines the prior attainment of mastery of the tasks and/or supporting skills and knowledge (learning objectives) taught <u>within</u> the subsequent instructional unit. It is, in fact, a version of the instructional unit's tests/post-test, in that it covers the same objectives. Objective mastery pretests are used to "test-out" (which is really another way of certifying mastery) of objectives taught during an instructional unit (IU) and may be given before a course, phase, module, or lesson.

b.If the learner "tests-out" of certain instruction (especially group-paced Ius or instruction which has a combination of self-paced and group-paced instruction), decisions must be made as to how the learner will be managed. These options include: simply allowing the learner to skip the "mastered" potion of the instruction, moving him/her to a class that is further along in the curriculum (i.e., recycle forward), giving him/her advanced training, using the learner as assistant instructor/aid/tutor, giving the learner free time, returning the learner temporarily to the unit, or giving him/her other "rewarding"-type activities. If simply allowing the learner to skip the mastered portion or to be recycled forward is not feasible, use as an assistant/aid is recommended. A note of caution: If the learner feels that objective mastery performance will result in non-rewarding/ discouraging consequences, the test results may not be a valid measure of his/her level of mastery. As a minimum, learners must be praised for successful pretest objective mastery and not required to take the mastered instruction.

- **4. GENERAL POLICY:** IAW TR 350-70, the policy for pretests is as follows:
- a. <u>Mastery pretests</u> are mandatory for self-paced, computer-delivered training. In other situations, objective mastery pretests are highly recommended (with the exception noted in para. 5 below). Justifications for exceptions to this policy must be based upon para. 5 below and be documented.
- b. <u>Performance-based</u>, <u>prerequisite pretests</u> are highly recommended in the absence of other clear and convincing evidence that the learner has obtained mastery of the necessary prerequisite objectives.
- (1) To avoid use of these pretests, the TD proponent must have assurance from knowledge based on learner records or learner performance on previous lessons, modules, or courses that the learner **does have** the entry-level skills required.
- (2) Sufficient evidence to waive the prerequisite test requirement must be determined on a learner by learner basis and be documented.
 - (3) If a learner is excused from taking a prerequisite test:
- (a) Inform the learner that s/he is being allowed to enter the course conditionally, based upon the evidence of attainment of prerequisites. Inform other personnel (i.e., the learner's commander/supervisor) as necessary or by local SOP of the status of the learner.
- (b) Keep a watchful eye on the learner for any failure to progress based upon lack of prerequisites.

5. PERFORMANCE TEST POLICY:

It is recognized that performance pretests (either prerequisite or mastery) given to untrained personnel can sometimes be dangerous to the learner or others. Therefore:

- a. <u>Performance pretests</u> are recommended (in the absence of clear evidence of prerequisite attainment) if, and only if, there exists (from the conduct of a risk assessment) a clear indication that the administration of the prerequisite tests will not be harmful to personnel or equipment. Simply put, if a learner can do harm to him/herself or others (or to equipment) trying to perform tasks/skills in which s/he is clearly inept, don't ask him/her to try to perform, or stop the test immediately if testing has begun.

 b. If <u>prerequisite verification</u> performance pre-testing is not feasible, you may have to assume attainment of the performance prerequisite from less than "clear and convincing" evidence of mastery attainment. This less than clear and convincing evidence may include performance-based test results, supervisor/peer assessments, self-assessments, prior training record, etc.
- c. If <u>mastery</u> performance pre-testing is not feasible, the learner must be required to go through <u>all</u> the training until it is known that the learner can be tested on the task/TLO safely.

6. TABLE SUMMARIZATION: The policies in the paragraphs above are summarized in the table below:

If the pretest use is:	And the pretest is:	and:	and there is:	Then pre- testing is:
Prerequisite verification	performance- based	N/A	no convincing proof of prior objective mastery	HIGHLY RECOMMEND- ED
	performance	the performance of the objective can be safely tested	no convincing proof of prior objective mastery	HIGHLY RECOMMEND- ED
	either performance- based or performance	N/A	convincing proof of prior objective(s) mastery	Unnecessary
Objective mastery determination	Performance	the performance of the objective can be safely tested	N/A	HIGHLY RECOMMEND- ED
	Performance- based (assumes performance can be safely	the subsequent instruction which teaches the objective is self-paced IMI	N/A	MANDATORY
	tested)	the subsequent instruction is not self-paced IMI	N/A	HIGHLY RECOMMEND- ED

If the pretest		and:	and there is:	Then pre-
use is:	pretest is:			testing is:
For Either	Performance	the performance	N/A	DO NOT
purpose		objective cannot		PRETEST VIA
		be safely tested		HANDS-ON
				(See para. 5)

6. ADMINISTRATION OF PRETESTS:

- a. Often the two types of pretests can be administered simultaneously to a learner as a single test or a series of tests that measure attainment of the prerequisite objectives as well as measure the prior attainment of the "to-be-taught" objectives. Each objective, whether prerequisite or to-be-taught, must be tested independently for mastery based upon the test-grading criterion (cutoff/passing/mastery level). Based upon the results obtained for each objective, the appropriate action must be taken.
- b. To avoid having a student enter a later phase of course without having the necessary phase prerequisites, test all prerequisites before entering the first phase/module/ lesson (i.e., don't wait to prerequisite test until just before the prerequisite skill/knowledge must be used --- there may not be time to plan/take mitigating action).
- c. To ensure training resources are not wasted, proctored prerequisite testing <u>before</u> the student shows up at a training site (i.e., unit, DL site, or other approved personnel) is highly recommended (i.e., test before any resources are wasted). As necessary, the unit commander/delegate or other responsible individual should ensure the test is administered and controlled.

Encl. 2

Setting Test Standards (Passing Scores) for Performance-Based Tests

- 1. This policy clarifies and elaborates on the policy and procedures found in TR 350-70, Chapter VI-7, section 7-5 c. (6) and section 7-6.f.
- 2. For criterion-referenced testing, the passing ("cutoff") score must be set <u>by objective</u> based upon the criterion standard for <u>each</u> objective tested within the test instrument. In other words, the item or set of items measuring a single objective is, in fact, a separate test with its own "passing" score. For ease of administration, a single test instrument may then be made up of many "mini-tests" that are administered concurrently within that instrument. (As an analogy, each "mini-test" is similar to a hands-on (performance) "station" used for certain performance tests with each "station" a "mini-test" measuring a different hands-on task/skill/performance.)

3. For example:

(1) Here is the test plan sample from section VI-7-6 e. of the regulation:

Lesson/TLO	ELO number	Learning	Quantity of	Total	Total
Number	(optional)	step/activity	Questions	Quantity	Quantity
			Needed For	of	of Items
			Coverage of ELO	Questions	For Two
			per Version	For	Versions
				Step	
0001	0001 A	A-1	2	4	
		A-2	1	2	
		A-4	1	2	
		A-5	3	6	
		A-7	3	6	20
	0001 B	B-1	5	10	
		B-3	3	6	16
0002	0001 A	A-2	3	6	
		A-4	2	4	
		A-5	2	4	
		A-6	2	4	18

In this example, you have determined that you need 10 questions (in each version of the test) to adequately cover ELO 0001A. This set of 10 questions-- and only this set-- will provide the information needed to make judgments about each learner's mastery of the ELO. Therefore, the "standard" for this ELO must be based upon the learners' responses to this set of questions and only this set of questions.

- (2) Applying the guidance of para. VI-7-6 f., the "cutoff" score could reasonably be set at 10 correct of 10 (100%) as long as the consequences of not passing the first time are reasonable (i.e., the system can tolerate the time and resources needed for remediation and re-testing). NOTE: This is especially true of self-paced instruction. In most cases, training delivered via self-paced instruction should have the objective criterion standard (passing score) set at 100% per objective.
- (3) As initially written, some written test items or set of items may have test/test item construction errors which may lead to a learner's incorrect response when he is actually a TLO/ELO master/performer. Proper test and instructional material validation should reduce these occasions. If test construction errors are noted after administration, the item(s) can be zero-weighted so as to allow attainment of the assigned cutoff level without remediation and re-testing. The test proponent should give the administering activity specific, limited discretionary zero-weighting authority in the test administration instructions, or the zero-weighting decision after administration must be coordinated with the test proponent.
- 4. The setting of an overall passing score at an arbitrary percentage (for example 70%) for a composite test which tests many learning objectives is extremely poor testing procedure and will not be done.
- 5. It is strongly recommended that the standard for performance-based (written) tests be set at 100%. As additional evidence is obtained, the 100% standard may be adjusted down if and only if -
- (1) the 100% standard is not feasible due to the resources which would have to be expended to remediate and retest to a 100% standard and there is clear and convincing evidence that less than a 100% standard will distinguish between masters and non-masters or is adequate to certify competency, OR,
- (3) the clear lack of criticality of the specific TLO/ELO being tested will allow a less than 100% standard and there is clear and convincing evidence that less than a 100% standard will distinguish between masters and non-masters or is adequate to certify competency
- 6. The setting of initial cutoffs scores less than 100% must be based exclusively upon the lack or criticality of the TLO/ELO being tested (i.e., initially, resources required for remediation and re-testing to master the objective should **not** be a factor in the setting of the cutoff score). Determination must be made by a consensus of subject-matter experts and test developers that a 100% standard is not necessary. While administering the test, more precise data can be collected to help set a "better" cutoff score.
- 7. In your course design documentation, document the method, assumptions, and rationale by which cutoff scores are set for each test.

<u>Note</u>: This philosophy may be new to those who have taken or given "norm-referenced" or "domain-referenced" tests throughout their years of schooling. These tests usually accept less than perfect knowledge/performance because teaching to mastery cannot be accomplished or is even desired. Within Army training, we cannot afford <u>not</u> to teach to

mastery. When performance/knowledge must be guaranteed due to the consequences of inadequate performance/knowledge, testing to the very highest possible standard - 100% when necessary - is absolutely critical. For example, which single critical knowledge (fact) regarding the characteristics of a particular bomb fuse would you like to not have to prove you knew if you later had to defuse the bomb. The same could be said of knowledge of the actual procedure that should be used for disarming a particular bomb before time/resources are wasted in practicing the disarming.

Encl. 3 End-of-Phase Tests for DL Phases of Courses

- 1. IAW paragraph VI-7-4 e. (3), TR 350-70, an end-of-phase test:
- a. Evaluates a learner's accomplishment of all learning objectives presented in the phase.
- b. Is recommended for courses structured where there is a significant time gap between the phases or there is a major change in training focus between phases.
- c. Is **not** required.
- 2. The following guidance applies to the use of end-of phase tests for courses that have a DL phase followed by a resident phase.
- 3. While the decision to use end-of-phase tests is indeed a design issue that is specific to each DL course/module, the use of an end-of-phase test is highly recommended if the tasks/skills/knowledge taught are not conclusively acquired (i.e., their acquisition is determined via testing) within the sequential and progressive administration of the courseware (i.e., if certification of competency does not takes place after each lesson/module incrementally throughout the DL training), and progressive administration of the courseware (i.e., if certification of competency does not takes place after each lesson/module incrementally throughout the DL training), and progressive administration of the courseware (i.e., if certification of competency does not takes place after each lesson/module incrementally throughout the DL training), and progressive administration of the courseware (i.e., if certification of competency does not takes place after each lesson/module incrementally throughout the DL training), and progressive administration of the courseware (i.e., if certification of competency does not takes place after each lesson/module incrementally throughout the DL training).
- a. The resident phase quickly builds upon the expected mastery of the skills/knowledge/performances taught in the DL phase. For example, the resident phase moves quickly into the hands-on practice of procedures taught within the DL phase.
- b. There is a substantial break between the DL phase and the resident phase.
- c. The DL phase itself is of such length that the skills/knowledge/performances taught early in the phase are suspected of decaying, or have been proven to decay over time, and must be reinforced/sustained before the leaner exits the phase. NOTE: This last statement might also apply to a course that is taught entirely by DL (although the test by definition is now an "end-of-course" test, not an "end-of-phase" test).
- d. There is no time within the resident phase for re-testing or remediation.
- e. The end-of-phase test is really a "capstone" performance or performance-based exercise used to measure the mastery of the critical combination of skills/knowledge/performances taught individually throughout the phase.

<u>Note:</u> "Conclusively acquired" means that the mastery level for the task/skill/knowledge taught within the DL phase is sustainable until the time it is needed in the resident phase.

4. Remember that the end-of-phase test is the last opportunity to determine task/skill/knowledge mastery and provide remediation-to-mastery prior to the use of the skills/knowledge within the subsequent phase. Therefore, the use of an end-of-phase test must be seriously considered. Some mitigation of risk is possible by the planned pretesting of the resident phase prerequisites at the beginning of the resident phase (i.e., "pre-testing" those skills/knowledge which should have been acquired during the DL phase (See Pretests)). Nevertheless, it is much more cost-effective to provide remediation and re-testing during the DL phase than to have to retrain/remove from training after the student reports to the resident phase.

Encl. 4 Test Control Policy and Procedures

1. Philosophy:

- a. The philosophy of test control is to apply <u>appropriate</u> measures to reduce the possibility of test compromise to an acceptable level, without unduly burdening personnel or functions. This philosophy is based upon the elements listed in paragraphs b. -e. below.
- b. As we move towards more performance testing, and performance-based tests being embedded into electronically delivered courseware, the need for elaborate test control procedures have significantly decreased.
- c. Although the possible seriousness of test compromise may be extreme (that is, certifying a non-performer as actually knowing how to perform), normally, before life, mission, or equipment is put at risk, it is likely that the former student will be evaluated, coached, and/or observed. This ensures the certification he/she obtained in institutional training is accurate and transferable to the job or to later learning activities.
- d. All staff and faculty members of the administering activity are in a trusted position and are expected to exercise due caution and common sense in the handling of sensitive test materials.
- e. Furthermore, as part of their oath of office, students in any evaluated learning environment have the clear and undeniable responsibility, under penalty of applicable laws/regulations, not to give or receive unauthorized information or assistance.

2. Definitions:

- a. IAW TR 350-70, "test control" is the application of security measures to protect tests and test items and related sensitive material from unauthorized disclosure from the time of their creation until they become obsolete or are destroyed.
- b. **Test:** A device, technique, or measuring tool used to --
- (1) Determine if a student or group can accomplish the objective to the established standard.
- (2) Determine if training does what it is designed to do efficiently and effectively.
- (3) Measure the skill, knowledge, intelligence, competencies, or other aptitudes of an individual or group.
- (4) Collect data as a basis for assessing the degree to which a system meets, exceeds, or fails to meet the technical or operational properties ascribed to the system.

c. **Sensitive test material:** Any student measurement/testing material that by its nature must be controlled to assure the validity of the test responses. Without this assurance, the goals of testing cannot be accomplished. Sensitive material may include, but not be limited to: individual test items, test booklets, test administration guides, adjunct test material, "scratchpads" and "notes", checklists, and scoring keys used for performance and performance-based exercises and tests.

3. Purpose & Applicability:

- a. This document provides guidance and procedures for the proper control of student performance measuring instruments (tests), test items, and related sensitive material, such as specific scenarios and scoring keys.
- b. Although primarily intended for active and reserve component test administrators, and other test instrument handlers at the testing site/institution, it also provides information and requirements critical to test proponents, reproduction and transmittal activities, and any other activities/personnel who may handle sensitive test materials.
- c. If needed for administrative ease or standardization <u>and</u> for reduction in test compromises, local test administering activities may establish additional internal test control procedures beyond those required in this SOP. All developing activities must used due care to ensure the procedures can be shown to be of significant value in reducing test compromises without unnecessarily administratively burdening, delaying, or costing personnel or other training/education functions.
- d. Security of classified tests will be handled in accordance with the appropriate regulations (AR 380-5) and are not further addressed in this SOP.

4. Responsibilities:

- a. The primary responsibility for ensuring inappropriate disclosure/acquisition does not occur, logically and legally rests upon the student. Any student who illegally acquires controlled test materials, and/or unintentionally acquires test material **and** uses/transmits the material illegally, have violated their oath and must be dealt with harshly, swiftly, and convincingly. Students must be directed to report/identify all possible test material handling situations that might lead to inadvertent test compromise.
- b. All personnel who may intentionally or unintentionally come in contact with sensitive test materials have the responsibility of reducing the possibility of unintentional disclosure of test items or materials (i.e., test compromise). In particular, the staff and faculty of the test administering activity have a primary role in implementing these procedures.
- c. All commanders, staffs, department/division heads, instructors, and other personnel who might come in contact with sensitive test materials have the responsibility for limiting test material access to those individuals having an absolute "need to know" status. As with classified material, rank or position should not be the primary determining factor in determining "need to know".
- d. As stated in TR 350-70, Commanders/Commandants, and Training/TD (Task) Proponents are responsible to implement the appropriate level of test and test item control. This requirement applies to all activities that may have sensitive test material under their control that must be

secured. See Para. 5 below and the remainder of this document for full explanation of what this means for the test administering organization.

- 5. TRADOC Regulation (TR) 350-70 Regulatory Guidance:
- a. For comprehensiveness, the applicable regulatory guidance pertaining to Test Control, as found in TR 350-70, is reiterated below. To accomplish the implementation of the appropriate level of test and test item control required by TR 350-70, administering organizations must:
- (1) Maintain security of all test items, tests, test administration instructions (if necessary), checklists, scoring keys, and test results during test development, transmittal, storage, retrieval, and administration consistent with the appropriate level of test control as determined by applying the guidelines in "Test Control," (see para. below).
- (2) Develop and specify in a lesson plan, Test Administration Guide, the Student Testing Plan, and/or separate Test Control Standard Operating Procedure (SOP) (if desired) the exact procedures to be followed during resident test administration to ensure the proper level of test control.
- (3) Regardless of how final test/test items will ultimately be administered, restrict access to paper-based copies of proposed or final test items, scoring/answer keys, or test results to those personnel demonstrating a valid need for the information.
- (4) As necessary, in conjunction with information management specialists, develop and specify procedures to ensure electronic copies of tests/test items and scoring/answer keys are protected from unauthorized disclosure. These procedures:

Must include	May include	
Restrictions on access, reproduction, and	Authentication methods.	
distribution.		
Password protection.	Encryption technologies.	
Required student warnings/certifications.	System intrusion detection/	
_	prevention methods.	

- (5) Immediately investigate <u>suspected</u> compromises and take appropriate actions to reduce the impact of test/test item compromises.
- (6) Ensure the test is administered exactly IAW the test administration instructions.
- (7) Ensure test control procedures include a method to determine with reasonable assurance the identity of the test taker.

b. As found in TR 350-70, the following general guidelines should be used for the control of tests:

If the test/test item	Then the test/test item requires
(1)Mirrors the task/TLO and must always be performed in exactly the same way	No security measures for adequate test control. For example, Perform CPR, disassemble an M-16A1, etc.
(2)Has only a few possible variations.	That all-possible variations MUST be protected from unauthorized disclosure.
(3)Has many possible variations.	Security measures sufficient to avoid making known to the individual student the specific variation that s/he will receive. (i.e., due to its size, making known the entire domain of possible test items will not be detrimental to student testing). For example, for testing purposes a student is required to repair 5 of 30 possible common-occurring faults in a microcomputer. Making known to the student the entire domain of 30 faults is unimportant, but once a particular subset of 5 faults is assigned for that student to be evaluated on, the subset must not be made known to the student until appropriate.

- c. The designation of whether a test/test item is a Type 1, 2, and 3 above <u>is solely the</u> responsibility of the test designer (proponent).
- **6. Test Proponent Responsibilities:** The test proponent must designate adequate procedures to ensure test security when mailing sensitive test material. The following controls should be applied by the test development/reproduction activities and are provided for information to test administering activities. If these controls are not already applied to the tests you receive, apply them immediately (if possible) and/or contact the test development/reproduction activity.
- (a) Each page of all sensitive test material which must be controlled (i.e., except for Type 1 IAW the matrix above) must be clearly labeled "FOUO- Sensitive Examination (Testing) Materials", or similar words, to clearly indicate their nature. This includes paper copies or portable disks/diskettes (floppies/ZIP/CD). Paper files containing test materials should be labeled similarly as well.
- (b) The first page of all controlled testing material, whether paper or electronic (when displayed on the screen) in nature, must have the label indicated in 6(a) above. It is highly recommended that paper versions of tests have the warning on <u>each</u> page as well as the cover sheet.
- (c) All electronic versions of sensitive test material should have the warning in 6(a) above as well as the warning "DO NOT COPY, PRINT, TRANSMIT, OR SAVE UNLESS SPECIFICALLY AUTHORIZED" (or words to this effect) on any portable medium <u>and</u> on first page/screen seen when opening the file.

- 7. Test Administration Control Requirements:
- a. **Common Controls:** The following common controls should be implemented by the administering activity for all test materials and test administration situations:
- (1) Every student's identity must be positively verified before test administration.
- (2) Before the administration of the first test in a course (usually at the beginning of each course/separate phase), all students must be advised of the following:
- (a) they will not acquire or provide inappropriate assistance either before, during or after any test, except as instructed (i.e. for group activities).
- (b) they will report any unauthorized assistance (either before, during, or after the test administration) of which they may have knowledge.

(Note: For legal reasons, first-time notification (i.e., during course inprocessing) should be in writing and acknowledged by the student. Student signature on acknowledgment is <u>highly</u> recommended. Reiteration of the above before each test is recommended.)

- (3) As a minimum, sensitive test material must be secured IAW the following guidance:
- (a) Commanders/managers will ensure a responsible party (a Unit Test Control Officer, course manager, instructor, Distributed Training Facility Manager, etc.) is assigned to control access to sensitive testing material from receipt to return or destruction.
- (b) Assess to all sensitive test items will be controlled based upon a clear and verifiable need, and access will be limited to the fewest individuals feasible, consistent with efficient operations.
- (c) Sensitive paper-based test material and portable diskette/CD/ZIP disk-based test material will be secured in locked containers or cabinets. Proper key control to these sensitive containers must be exercised as with other sensitive keys.
- (d) IAW specific procedures and methods indicated in local SOPs, sensitive test materials will be inventoried at least quarterly and a record made of the inventory. Additional inventories may be necessary upon reproduction of exam booklets. Training institutions will specify maintenance procedures for inventories.
- (e) Each time sensitive test material (whether paper-based or disk-based) is removed from its locked container, a record of sign-out (name, organization, etc.) will be made.
- (f) Whenever sensitive materials are destroyed or transferred a record will be made of:
 - 1 Date of Transfer or Destruction
 - 2 Method of Transfer or Destruction
 - <u>3</u> To whom the material was transferred; or who was responsible for destruction.
 - 4 The exact material destroyed or transferred.

b. Matrix for Application of Additional Controls:

In addition to the common controls the following controls must be applied as indicated.

Form/Media	Controls to be Applied
Hands-0n Tests that Mirror	No controls necessary for test control purposes.
Task	
*See narrative for	
explanation	
Courseware Embedded	Common Controls.
Tests/Material (stored only	
on servers)	Secure Electronic Files through password protection (and secure passwords).
	Restrict access when viewing material on-screen.
	Allow NO unauthorized copying/printing/transfer/storage of files.
	If possible, randomly assign test versions and various versions of individual
	items/sets to students.
Portable Diskette/ Disk-	Common Controls.
based Test	
material(floppy/CD/ZIP)	Do not store material on, or transfer to, an uncontrolled system.
	Electronically secure storage medium (diskette/CD-ROM) via at least password
	protection (and secure passwords); and physically secure disk/diskette under
	lock in a lockable container.
	Restrict access when viewing material on-screen.
	Allow NO unauthorized copying/printing/transfer/storage of files.
Paper-and-pencil	Common Controls.
Tests	Keep all copies of all sensitive materials under lock on a lockable container.
	Make sufficient copies immediately before first administration. Make additional
	copies only if necessary and immediately before subsequent administrations.
	Make minimum copies required for single administration.
	Destroy extraneous/unneeded materials by shredding or burning.
	Randomly assign alternate forms.
	Allow NO unauthorized copying/scanning of material.

8. Actions for Loss, Compromise, or Possible Compromise of Sensitive Test Materials:

The following guidance is provided if test compromise is suspected:

- a. Every incidence of suspected unauthorized disclosure of sensitive test material must be investigated, and the compromise substantiated, refuted, or left unsubstantiated. If the possible compromise is refuted, no further action is necessary.
- b. As determined necessary by the department/division head/commander or other designated authority, report the compromise/potential compromise to your chain of command. If needed for assistance, the compromise/potential compromise may also be reported to the proponent school. The test proponent may advise on appropriate procedures to mitigate the risk.
- c. The commander/other designated authority will:
- (1) Insure that a thorough investigation of the compromise, possible compromise, or loss has been made and that proper actions are initiated to prevent recurrence of loss or compromise of test materials.
- (2) Decide the risk mitigation factors to be employed.
- (3) Maintain a record of the results of the investigation and actions taken, if any.

- (4) If warranted, initiate investigation under AR 15-6.
- d. If the compromise is substantiated or cannot be definitely refuted (i.e., suspected but unsubstantiated), a risk assessment must be done immediately (based upon the level of control required of the test), and any serious consequences from the loss must be mitigated. At the discretion of the department/division head or other designated authority, the procedures for mitigation should include, but not be limited to, one or more of the following:
- (1) Withdrawal of the test from use.
- (2) Re-testing of one or more students using non-compromised/unsuspected versions.
- (3) Requesting assistance from the proponent school.
- (4) Take no action (i.e., in the case of unsubstantiated).

9. Actions for Destruction, Transfer, and Loan of Sensitive Test Materials:

- a. <u>Destruction of test materials</u>. Test materials that are no longer needed by the administering activity must be destroyed immediately by the test administering activity, IAW such procedures as they may determine based upon the medium of the material (i.e. burning, purging of files, reformatting diskettes, etc.).
- b. <u>Transfer of test materials</u>. Test administering activities may transfer surplus tests to another activity that needs them. The activity commander/other designated authority must approve and monitor all transfers of sensitive test materials.
- c. <u>Loan of test material</u>. When a need arises, the activities may borrow a common use test from the nearest active duty, National Guard, or Army Reserve activity. In such cases, the activities involved must take proper security precautions in transferal of the test material.

10. Actions for Test Control during Administration:

- a. In addition to the applied controls as indicated above, the primary means of test control during actual administration is by following the proponent instructions precisely, as found in the test administrative instructions for each test.
- b. Specific directions for test administration and scoring are contained in manuals that accompany each test or in the student evaluation plan or test administration plan. These procedures must be followed strictly. Test examiners and proctors will use only proponent test materials in preparation for or during the administration of tests.
- c. If (in the opinion of designated authority) any aspect of test security or administration is unclear or unmanageable, test administrators must immediately contact the test proponent for additional guidance before administration.

11. Point of Contact for Additional Guidance:

- a. The point of contact for any questions regarding test administration and control procedures provided with the test is the training development proponent activity for that test.
- b. The proponent for this policy is the Training Development and Analysis Activity, Deputy Chief of Staff for Training, ATTG-CD, U. S. Army Training and Doctrine Command, Ft. Monroe, VA 23651. Any questions should be addressed to the above or to tylere@monroe.army.mil, DSN 680-5464, Com: 757-728-5464. Any recommended changes should be sent to the above or to the

proponent for this policy, preferably electronically, with all DA 2028 information included (in particular, rationale for any changes).

Encl. 5

Conduct of Test Reviews, Remediation, and Retests

1. **Definitions**:

a. A **test review** is a learning event/activity that occurs after the grading of tests which provides to the learner the items that were missed and short immediate remediation on the correct answer. This remediation usually consists of identification of the correct answer and the reasons their answer was wrong and/or the correct answer was correct.

NOTE: To avoid confusion with a slightly different procedure, a test review should <u>not</u> be referred to as an after-action review (AAR).

- b. **Remedial instruction (aka "remediation")** are those learning activities/events provided to a student after test grading in preparation for re-testing to provide special, additional, or refreshment training on those learning objectives not mastered.
- c. A **retest** consists of a second or subsequent test administered to a learner which covers the learning objective(s) not mastered (passed) on the preceding test administration.

2. Test Review:

- a. The conduct of a test review after each test is a mandatory element of instruction.
- b. A test review should be conducted on individual test items missed even if all learners mastered all objectives.
- c. Each student should be given feedback on each item that they missed (i.e., every missed item covered either individually or as a group). To accomplish this, it is recommended that you hand out some sort of form to each student indicating which questions were missed (only those missed by that student), then go over each question missed by any student. This should include "working" through problems.
- d. Methods to cover the items missed other than returning of the actual test/test "booklet" are recommended.
- e. Since the test review is critical learning activity, time and care should be given to its preparation.
- g. During the test review, it is also highly recommended that any learner(s) comments be captured which might indicate the need for test/instructional improvement. Involvement of a training/test developer is recommended.
- h. Slight modification to the above procedures will be necessary when the instruction and test review is conducted via self-paced instruction. For example, for self-paced instruction delivered by computer, test review and remediation should be programmed into the course design and testing strategy, and an unlimited number of retest/remediation cycles are allowed until the maximum time to complete the lesson is reached.

3. Remediation:

- a. Remediation on every TLO not mastered on the first test administration is mandatory.
- b. The activities involved in remediation must directly address only the TLOs not mastered.
- c. The number of TLOs that must be re-mediated will be the primary determining factor on the extent of remediation before re-testing.
- d. In general, the learner should be re-mediated until s/he is confident s/he has mastered the objective.

4. Retests:

- a. After remediation, at least one retest on each TLOs not mastered is mandatory.
- b. The decision to allow subsequent remediation and retests after the initial retest should be made after consideration of the following:
- (1) What will be the impact if further re-testing is not allowed (i.e., recycle, course expulsion, reassignment, reclassification, non-promotion, Army expulsion, etc.)?
- (2) What resources have been expended thus far to get the learner to this stage of their training?
- (3) Are there sufficient resources (including time) to conduct further remediation and retesting?
- (4) Is there evidence to suggest that the learner(s) will or will not master the objective with further remediation?
- (5) Are there other exigent circumstances that will preclude further remediation and retesting?
- c. It is highly recommended that human decision-makers most knowledgeable of the above factors be the final deciding authority on decisions to stop/continue re-testing.
- d. The exact number and timing of retests and how decisions to stop/continue re-testing will be made must be documented in the Student Evaluation Plan and provided to each student before the first test is administered